

#2/205  
10/24/09

11011 U.S. PTO  
09/818851  
03/28/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Susumu Yoshiwara & Eisei Nigeme

Serial No.:

Filed:

For: MANUFACTURE AND USE OF EARTHQUAKE RESISTANT  
CONSTRUCTION BLOCKS

DISCLOSURE STATEMENT

\*\*\*\*\*

Honorable Commissioner of Patents & Trademarks  
Washington, D.C. 20231

Dear Sir:

For the convenience of the Examiner and to comply with 37 CFR 1.56, 2.97 and 1.98, the following are patents containing information which the Examiner may consider important in the examination of this application. Copies of these 15 U. S. patents that may be of interest are attached:

|         |           |           |           |           |
|---------|-----------|-----------|-----------|-----------|
| 591,949 | 954,410   | 1,534,353 | 2,645,115 | 4,442,149 |
| 801,361 | 984,878   | 1,971,051 | 2,696,729 | 5,820,299 |
| 918,366 | 1,487,578 | 2,250,175 | 3,559,361 | 5,992,119 |

The patents to G. Cheney (U.S. Patent No. 591,949, issued 19 October 1897) and Clayton et al (U.S. Patent No. 801,361, issued 10 Oct. 1905) and H. Quereau (U.S. Patent No. 918,366, issued 13 April 1909) and W. Gossett (U.S. Patent No. 954,410, issued 5 April 1910) and P. Aylett (U.S. Patent No. 984,878, issued 21 February 1911) and J. Blaski (U.S. Patent No. 2,250,175, issued 22 July 1941) and G. Sarros (U.S. Patent No. 3,559,361, issued

2 February 1971) are examples of various shape blocks, various means for securing them in place and processes for positioning them.

The patents to E. Kirkpatrick (U.S. Patent No. 1,487,578, issued 18 March 1924) and H. Besser (U.S. Patent No. 1,534,353, issued 21 April 1925) are examples of one block having different types of strata within the block.

M. Reiner et al (U.S. Patent No. 1,971,051, issued 21 August 1934) and P. Abeles (U.S. Patent No. 2,645,115, issued 14 July 1953 and V. Vander Heyden (U.S. Patent No. 2,696,729, issued 14 December 1954) are examples of various materials that are used to manufacture blocks with. M. Reiner et al teach that usual concrete is made of cement, sand and broken stone.

G. Bennet (U.S. Patent No. 4,442,149, issued 10 April 1984) and J. Anderson (U.S. Patent No. 5,820,299, issued 13 October 1998) are examples of the use of plastic tubes placed within structure for tension or reinforcement means.

Z. Rokhlin (U.S. Patent No. 5,992,119, filed 17 October 1997 and issued 30 November 1999) teaches directional reinforcement for earthquake resistance.

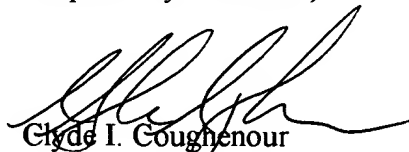
Of particular interest are the patents issued to P. Abeles and B. Vander Heyden. Both teach concrete blocks optionally including different materials including slag for light-weight strength and both including cavities for reinforcing rods in different shape blocks. B. Vander Heyden teaches strong, light, porous cementitious blocks made of soft porous aggregate cinder concrete or crushed slag particles bonded with cement that distributes compression stress, and tension rods, and prestress. In an arcuate shape, the upper separation can

be filled with shims or concrete. P. Abeles teaches molded blocks of natural or artificial suitably graded aggregates of light or heavy weight with a binding agent of cement, lime, glue or synthetic resin forming concrete (of pumice, foamed slag, cork or saw dust) for artificial stone, artificial lime-stone, synthetic concrete, dry clay or dry earthware.

The prior art teaches various concepts incorporated into the present invention. The present invention incorporates a unique combination of strata using a unique combination of materials to make a strong block with shock and energy dissipation finding various uses and, in particular, construction of arches with increased resistance to destruction by earthquake.

Applicant believes that none of the patents listed above, either individually or in combination, anticipate or render obvious applicant's claimed block structure or its use in combination.

Respectfully submitted,



Clyde I. Coughenour  
Attorney for Applicant  
Reg. No. 33,083  
Telephone No. (703) 221-8677

Enclosures: 15 Patents  
Form PTO-1449